

Corrective Effect of Ministerial Terminations on Presidential Approval

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Introduction

Introduction

Our main question is: **How do ministerial terminations affect presidential approval?**

This study makes a theoretical contribution in that, for the first time, it develops a theory of how ministerial terminations affect the popularity of presidents, taking into account a **blame-shifting dynamic** considering different features of presidential systems. Moreover, it makes a pioneering empirical contribution.

There is no evidence of how presidents' strategic decisions about the cabinet alter presidential approval dynamics.

Theory

Cyclical Model of Presidential Approval

Across countries, presidential approval dynamics tend to follow a cyclical model with quadratic patterns (Brace and Hinckley, 1992; Carlin et al., 2018; Stimson, 1976). At the beginning of a presidential term, a **honeymoon period** is observed, implying high approval ratings during the early months after an election. These then begin to **deteriorate gradually** until, as new elections approach, a **slight recovery** tends to be observed.

It is also important to consider the **economy's influence** on approval dynamics. This connects with the large body of literature on **retrospective voting** according to which leaders are evaluated mainly on the basis of the recent past, rather than their long-term performance (Achen and Bartels, 2016; Healy and Lenz, 2014; Sances, 2021).

Corrective Effect of the Resignation of Questioned Ministers

In parliamentary systems, prime ministers may act strategically and **dismiss cabinet members** who are performing poorly or have become involved in scandals of different types, thereby generating a recuperative or **corrective effect on approval** (Dewan and Dowding, 2005). However, there is **little evidence of this**:

- Dewan and Dowding (2005), using IV models, found a **corrective effect** on government popularity in the UK, but only if the resignation issue had received extensive media coverage.
- Miwa (2018) found a **positive effect** on cabinet approval in Japan when survey respondents were given information about a recent ministerial reshuffle.
- McAllister (2003) detected a **negative relationship** between the dismissal of ministers for irregularities and the popularity of the prime minister in Australia.

Blame-Shifting Dynamic

Given the pre-eminence and the visibility of presidential leadership (i.e., president operates as a *formateur*, see Cheibub and Limongi, 2002; Schleiter, 2020), it is to be expected that government successes and failures will be attributed mainly to the president and, in order to achieve a **corrective effect**, there should be **blame-shifting dynamic**.

Our central argument is that, in coalition governments, political responsibility may be more easily attributed to the different parties and factions, weakening personalisation centred on the president and facilitating blame-shifting. This could permit the **encapsulation of a scandal** by associating it more directly with a specific minister.

Moreover, **the effect should be more robust** in the case of the dismissal of partisan, **tainted ministers who do not belong to the same party as the president**.

Empirical Strategy

Cross-National Data

The econometric strategy is applied to a dataset of quarterly observations from 124 governments in 12 presidential democracies between 1976 and 2021. This permits comparisons between  Argentina,  Bolivia,  Brazil,  Chile,  Colombia, Costa Rica,  Ecuador,  Mexico,  Paraguay,  Peru,  Uruguay and  Venezuela, excluding the periods of dictatorship prior to the third wave of democratisation in the region.

The dataset was built through an archival review of almost 50 years with an optical recognition algorithm (Ooms, 2021) and semi-supervised machine learning models to identify calls for the resignation of cabinet members.

Cross-National Data

Our data-gathering process sought to identify observations in a **dyadic relationship** composed of ministers-ministries.

With these individual-level indicators, we constructed a database of governments with quarterly observations. Consequently, the dataset contains *i-th* **observations of governments** defined in time intervals that correspond to the four **quarters of each year**.

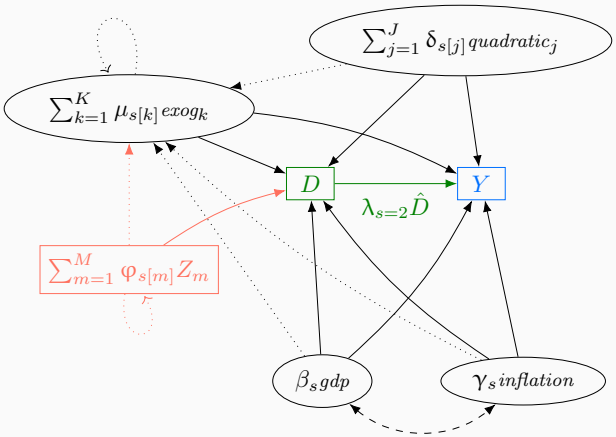
This allowed us to incorporate **time-varying indicators** such as the smoothed quarterly presidential approval of Carlin et al. (2019), indicators from the World Bank (2022), political systems indicators from the Inter-American Development Bank (IDB; see Cruz et al., 2021) and WhoGov dataset (Nyrup and Bramwell, 2020).

Observational Panel Models

We fitted OLSs to test the **quadratic dynamics of presidential approval** using approval data, macroeconomic indicators, dummy variables for quarters (honeymoon and slight recovery towards the end of the term) and a lagged indicator of approval to control for **serial correlation**. The following is the fully specified model:

$$Y_i = \alpha_i + \zeta\, Y_{t-1[i]} + \beta\, GDP_i + \gamma\, log(inflation)_i + \sum_{j=1}^{J} \delta_j\, quadratic_{j[i]} + \eta\, quarter_i + \xi, country_i + \varepsilon_i \quad (1)$$

IV Regressions: Identification Strategy



D represents dismissals of tainted ministers and *Y* presidential approval

Dotted lines represent correlations between specific covariates of the vectors while subscript *S* represents the stage of IV estimation. This causal diagram permitted the identification of **62 testable implications to test for CIA**.

Only in five implications is the lower or upper CI less than -0.2 or greater than 0.2. This does not compromise our identification strategy.

IV Regressions: Identification Strategy

1. The age of ministers operates as a proxy for cabinet experience, which decreases the number of ministerial terminations **(relevance of Z)**;
2. The proportion of nonpartisan ministers in the cabinet reflects the president's level of control over agency loss, thereby decreasing the costs of removing tainted ministers **(relevance of Z)**;
3. The age and proportion of nonpartisan ministers affect presidential approval only through the dismissal of tainted ministers **(exclusion restriction)**;
4. The age and proportion of nonpartisan ministers share no common causes with presidential approval **(unconfoundedness/CIA)**;
5. A more experienced cabinet never causes the president to increase dismissals **(partial monotonicity)**;
6. A greater level of control of agency loss never discourages dismissals **(partial monotonicity)**.

* We also control for reverse causation and overidentification

IV Regressions: Prais-Winsten Transformation

In the observational models, we control for serial correlation by using $Y_{t-1[i]}$, however, in IV estimations the vector of Z must not be correlated with the error term. Therefore, we used a **three-stage procedure** (Dewan and Dowding, 2005; Greene, 2003). First, we used a model including the endogenous variable D, the k-th vector and FE:

$$Y_i = \alpha_i + \zeta\, Y_{t-1[i]} + \lambda_1 D_i + \sum_{k=1}^{K} \mu_k\, exog_{k[i]} + \beta\, GDP_i + \gamma\, log(inflation)_i + \sum_{j=1}^{J} \delta_j\, quadratic_{j[i]} + \eta\, quarter_i + \xi, country_i + \varepsilon_i \tag{2}$$

This allows us to obtain ρ for the AR(1) and apply a **Prais-Winsten transformation**.

IV Regressions: OLS First Stage

Then, we carried out a **regression of D with OLS** on the instruments, the vector of exogenous variables and the variables used in our baseline observational model. In this way, we were able to obtain an estimate of $\hat{D}$:

$$D_i = \alpha_{1[i]} + \sum_{m=1}^{M} \varphi_m Z_{m[i]} + \sum_{k=1}^{K} \mu_{1[k]} exog_{k[i]} + \beta_1 GDP_i + \gamma_1 log(inflation)_i + \sum_{j=1}^{J} \delta_{1[j]} quadratic_{j[i]} + \varepsilon_{1[i]} \quad (3)$$

This equation must be adjusted for the models with **two-way interactions**, replacing LHS with the respective interaction term $D_i \times exog_{k[i]}$.

IV Regressions: 2SLS Second Stage

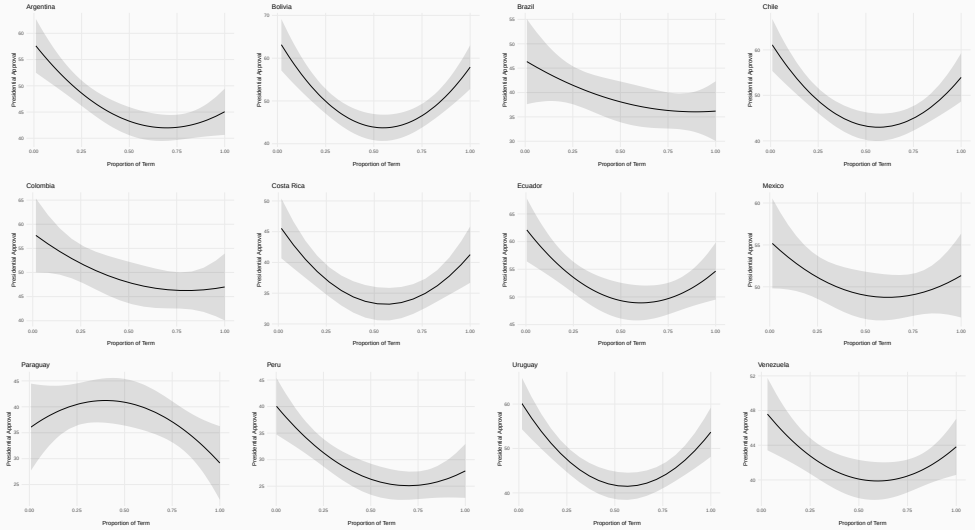
We obtained estimations with IV of the **effect of dismissing tainted ministers on presidential approval** (weighted average of LATEs for compliers):

$$Y_i = \alpha_{2[i]} + \lambda_2 \hat{D}_i + \sum_{k=1}^{K} \mu_{2[k]}\, exog_{k[i]} + \beta_2\, GDP_i + \gamma_2\, log(inflation)_i + \sum_{j=1}^{J} \delta_{2[j]}\, quadratic_{j[i]} + \varepsilon_{2[i]} \tag{4}$$

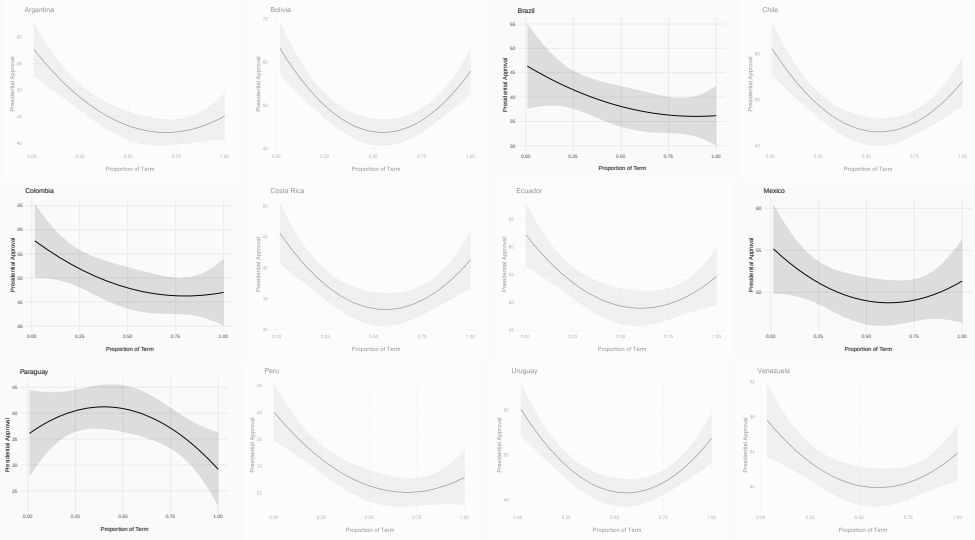
For the case of interactions, the term $\lambda_3 \hat{D}_i \times exog_{k[i]}$ must be incorporated in the RHS of the equation for the corresponding *k-th* variable to test our empirical expectation.

Main Results

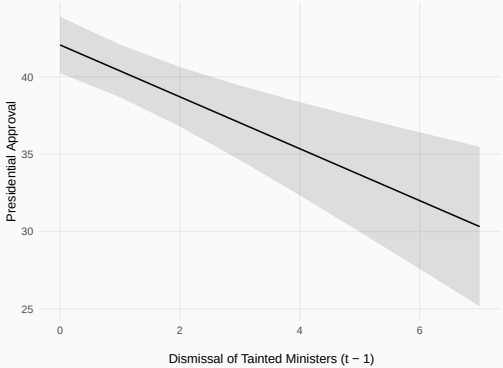
Dynamics of Presidential Approval

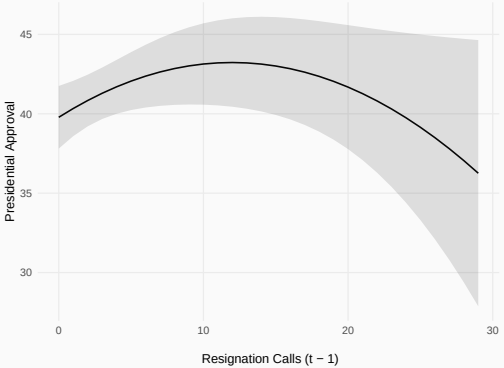


Dynamics of Presidential Approval



Dismissals of Tainted Ministers and Quadratic Effect of Resignation Calls





IV Estimates of Dismissals of Ministers on Presidential Approval

We tested the relationship between our vector of instruments and D during the **IV first stage with OLS** ☑

In 2SLS, only in model IV, a corrective effect is observed in the interaction between the dismissal of tainted ministers and **coalition governments**.

Correction of about 10.1 points (weighted LATEs), and between 9.1 and 9.3 (MTE).

	Smoothed Approval			
Dismissals of tainted ministers $(t-1)$	−21.621***	−26.150**	29.661	−42.354***
	(5.727)	(13.046)	(40.809)	(14.369)
Resignation calls $(t-1)$	2.088***	2.447**	1.059	1.599**
	(0.698)	(1.238)	(1.353)	(0.639)
Resignation calls $(t-1)$ squared	−0.160**	−0.432	0.033	−0.136**
	(0.066)	(0.765)	(0.192)	(0.058)
Issue visibility $(t-1)$	−5.013**	−4.975**	46.584	−4.680**
	(2.310)	(2.250)	(41.566)	(2.201)
Coalition government	5.031***	4.048	8.512*	−15.032
	(1.946)	(3.502)	(4.993)	(9.690)
Dismissals × visibility		0.620		
		(1.734)		
Dismissals × calls squared			−210.783	
			(169.854)	
Dismissals × coalition				86.615**
				(43.999)
Constant	16.125***	18.352***	3.799	21.485***
	(1.363)	(6.217)	(10.256)	(3.219)
Some controls and tests were omitted due to space constraints				
Weak instruments	6.275***	6.275***	6.275***	6.275***
Weak interaction		0.631	4.342**	3.549**
Wu-Hausman	43.225***	22.422***	27.037***	26.187***
Sargan	3.374	3.371*	0.006	0.327
AIC	8301.312	8271.227	9729.241	8166.003
N	1122	1122	1122	1122

* $p \leq 0.1$; ** $p \leq 0.05$; *** $p \leq 0.01$

IV Tests and Robustness Checks

- Weak instrument test
- Wu-Hausman test for endogeneity
- Sargan test for overidentification
- CIA and exclusion restriction based on testable implications based and DAG
- Several tests such as VIF, Breusch-Pagan for robust SD, Durbin-Watson for AR(1), etc.
- 2SLS without Prais-Winsten
- 2SLS using dismissals of ministers not belonging to the president's party
  - **Stronger effect:** LATEs increased around 45.6%, and MTE is about 16.4 points.
- 2SLS excluding inflation (12.9% of missing obs.)
- 2SLS with an alternative measure of visibility

Take Aways

Take Aways

☑ Dismissal of ministers tends to have **negative repercussions** for the president, possibly because it crystallises a perception of poor performance, except in coalition governments.

☑ In coalition governments, the level of personalisation in the figure of the president is lower, permitting a **blame-shifting dynamic**. This implies the encapsulation of the questioning and a **corrective effect on the approval of about 10 points** in the next quarter.

☑ The effect is stronger (between 15 and 16 points) in the case of **tainted ministers who do not belong to the party of the president**, which tends to confirm the dynamic.

☑ An ancillary finding is that our observational panel regressions confirm the cyclical pattern of presidential approval (**outliers:** Brazil, Colombia, Mexico and Paraguay).

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Thank you very much!

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